

ABSTRACT OF THE DISCLOSURE

A process for making thin-film batteries including the steps of cleaning a glass or silicon substrate having an amorphous oxide layer several microns thick; defining with a mask the layer shape when depositing cobalt as an adhesion layer and platinum as a current collector; using the same mask as the preceding step to sputter a layer of  $\text{LiCoO}_2$  on the structure while rocking it back and forth; heating the substrate to  $300^\circ\text{C}$  for 30 minutes; sputtering with a new mask that defines the necessary electrolyte area; evaporating lithium metal anodes using an appropriate shadow mask; and, packaging the cell in a dry-room environment by applying a continuous bead of epoxy around the active cell areas and resting a glass slide over the top thereof.